Claim 2 (Amended)

A synchronization controller including a controller of a slave section for controlling an electric motor, said synchronization controller serving to accurately synchronize a rotational frequency and rotation phase of said electric motor or a machine shaft driven by said electric motor with a rotational frequency signal pulses and a Z phase pulse signal electronically generated within and outputted from a master section, not generated on rotation of a real electric motor in the master section, said slave section controller comprising:

a master rotational frequency detector and a master phase counter for simultaneously detecting the rotational frequency signal and the phase signal [from an output of an incremental encoder with a Z phase pulse coupled with the electric motor in the master section or from an output of a rotary encoder coupled with the machine shaft driven by said electric motor] outputted from the master section at all times, and said master phase counter operating to count the output signal pulses from said master section and being cleared with the Z phase pulse from said master section;

a slave rotational frequency detector and a slave phase counter for detecting simultaneously at all times the rotational frequency signal and the phase signal from an output of an incremental encoder with a Z phase pulse coupled with the electric motor of the slave section or from an output of an incremental encoder with a Z phase pulse coupled with the machine shaft driven by the electric motor, and said slave phase counter operating to count the output pulses of said encoder and being cleared with said Z phase pulse; and a phase deviation calculator for detecting a

rotational phase deviation from the outputs of said master phase counter and said slave phase counter at all times, according to counted overflow pulses and the counted output pulses of said master phase counter and said slave phase counter, there being matched an origin of said electric motor of the slave section or the machine shaft driven by said electric motor based upon the phase deviation detected by said phase deviation calculator to synchronize rotation phase of said electric motor or the machine shaft driven by said electric motor with the signal outputted from the master section.